

MTB/ ROAD BIKE/ TREKKING

**ENGLISH** 

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Sticker frame serial number (attached on top tube)



In the following image you will find a bike which shows all necessary parts, listed in the manual. We choosed an example of the wide range of bikes on the market.

01	chain rings	13	seat post
02	crankset	14	seat clamp
03	pedals	15	frame
04	front derailleur	15 a	chain stay
05	chain	15 b	seat stay
06	rear derailleur	15 c	linkage
07	sprocket cluster	16	fork
08	shifter	17	rear shock
09	brake levers	18	wheels
10	brakes	19	bar
10 a	brake disc	20	stem
10 b	brake caliper	21	head set
10 c	brakebooster	22	rear carrier
11	quick-release axles	23	light system
12	hubs	24	mud guard



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### **HANDBOOK**

**MOUNTAIN-, CROSS- AND FITNESS BIKES** 

TREKKING- AND CITY BIKE, ROAD BIKE

**ENGLISH** 

#### Dear Customer

We would like to thank you for your choice of a bike from our Company and thank you for your trust. With this purchase you have a high-quality, environmentally friendly means of travel which will give you a lot of pleasure and at the same time promote your health.

Your cycle dealer is also very important to you for advice and final assembly.

He is your point of contact for servicing, inspections, modifications and all types of repairs. Should you have any questions regarding our product please contact your cycle dealer.

### 1 About thisOwner's Manual

#### 1.1 Conventions

#### 1.1.1 Symbol

#### Note!

Draws your attention to items requiring your particular attention.



#### Warning!

Points out to you the possibility of slight personal injury and possible material damage.



#### Danger!

Points out to you the possibility of grave personal injury even leading to death.



#### **Risk of burns!**

Temperature exceeds 45°C (temperature at which egg white sets) and can cause burns on humans.

#### 1.1.2 Location indications

If this Owner's Manual states "right", "left", "front" or "back" this always means as seen when looking "in the direction of travel".

#### 1.1.3 List of abbreviations

#### 1.1.4 Definition of Terms

	-6		

A radial lack of true on the rim is colloquially known as a "run-out".

Bar	conventional unit for air pressure.
Torque	Also called tightening torque. Indicates how "tight" a screw has been tightened.
DIN	German Institute for Standardization.
EN	European standard (often related to DIN).
Specialist dealer /spe- cialist work- shop	In Germany: In this Owner's Manual the term "specialist dealer" and/or "specialist workshop" indicates a dealer trained as a bicycle mechanic and/or cycle mechanic authorised by the competent Chamber of Trade to operate a specialist workshop.  Similarly the latter must be authorised by the manufacturer of this cycle to check and confirm correct assembly and roadworthiness of this cycle.
Handforce	The force an average adult human can exert with his hand using low to medium effort.
IHK	In Germany: Chamber of Industry and Commerce
МТВ	Mountainbike
Nm	Newton meter; unit for torque
Pedelec	Pedal Electric Cycle
psi	pounds per square inch; American unit for pressure; 1 psi = 0.06897 bar
StVO	German Highway Code
StVZO	German Road Traffic Licensing Regulations

### Correct tightening

The term "correct tightening," indicates the state in which screw heads fit tight to the component over their entire surface.



Incorrect tightening

A loose screw can often be recognised by a projecting screw head.



You find the used technical terms for bicycle parts in the plate in the cuff sheets or at the individual pictures

### Laws:

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StVO (German Road Traffic Act)
and StVZO (German Roas Licensing
Regulation) are laws that are only applicable in Germany.

Before using your bicycle for the first time, please inform yourself about the laws applying to the use of your bicycle in your home country. Contact the relevant authorities and your specialist dealer on this matter.

- If you encounter phrases such as "...have all
  ...", "... have your bicycle ..." or the like, please
  note that they always address and refer to
  the child or the juvenile and his/her bicycle.
- Go through this Owner's Manual together and explain all chapters to your child, especially regarding the hazard warnings.
- As legal guardian it is your responsibility to ensure the safety of this bicycle and its safe use.

#### 1.2.1 Scope of Application

This Owner's Manual applies to: Please take information specific to your bicycle from the Owner's Manual for your bicycle model 2012. Please read Chapters 4 for information.

This operating manual is only valid if it was with the bicycle at the time of purchase. Please observe separate information, if available.



# Risk of Personal Injury and Material Damage!

Please take information specific to your bicycle from the Owner's Manual for your bicycle model.

- This Owner's Manual is not suitable for learning to ride a bicycle.
- This Owner's Manual is not suitable for learning riding techniques.

#### 1.2.2 Accompanying documentation

 Owner's Manual specific to your bicycle model. Parts Instructions.



# Risk of Personal Injury and Material Damage!

Due to the large number of existing bicycle parts it is impossible to provide a totally exhaustive set of instructions valid for all.

For our Pedelec/E-bikes it's very important to read the additional separate instruction manual for the Cube EPO Pedelec as well as this general Cube instruction manual.

 It is possible that components mounted to this bicycle have not been described in this operating manual.

- Please therefore always observe the accompanying parts instructions.
- Their instructions basically take precedence over any contrary instructions in the following text.
- Please consult your specialist retailer as to the accuracy and validity of this operating manual
- For more information, please consult your specialist retailer.

#### 1.2.3 Pictures

The pictures related to the descriptions
can be found right before or after the
respective texts.

### 2 For your safety

#### 2.1 Use your bicycle as intended

#### 2.1.1 Who may use your bicycle?



### Risk of Personal Injury and Material Damage!

- The rider must be able to ride a bicycle, i.e. he must possess a basic knowledge of the use of a bicycle and have the necessary sense of balance required to control and steer a bicycle.
- The rider must have be of the correct physical size for this bicycle (please consult your dealer).
- Children and teenagers must be able to operate the bicycle for certain.
   The operating equipments (e.g. brake levers)

You driving technique courses are offered by different facilities or coaches and it helps to improve your driving technique and the operation of your bicycle.

must be suitable for child's hands

#### 2.1.2 How may you ride your bicycle?



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# Risk of Personal Injury and Material Damage!

- Sit with your bottom on the saddle or ride out of the saddle, i.e. pedalling in a standing position.
- Hold the left handlebar grip with our left hand and the right hand handlebar grip with your right hand. Place your left foot on the left pedal and your right foot on the right pedal.
- Place your left foot on the left pedal and your right foot on the right pedal.
- Only use the bicycle as a pure means of travel.

#### 2.1.3 Where may you ride your bicycle?

All bicycles by this manufacturer are classified into Categories. You will find your bicycle's Category in your Service Card. (Last Page)
This is entered by your dealer on purchase (see also Chapter 4).

Touring: Paths, no jumps

Cross-country: Paths, no jumps

Urban: Paths, no jumps

Marathon: Unprepared paths,

no jumps

All Mountain: Unprepared paths,

jumps up to 0.5 metres

in height

Enduro: Unprepared paths at high

speed, jumps up to 1 m in

height

Freeride: Sports park/ bikepark

Dirt bike/BMX: Sports park/ bikepark

Kids: Paths, no jumps

Traveller: Paths, no jumps

Countrylite: Paths, no jumps

Downhill: Sports park/ bikepark

Road Racing: Paths, no jumps

Bikes of every category with racing wheel or tyres simil ar to

racing wheel: Roads, no jumps

### Roads and paths are classified as follows:

- Road: Asphalted
- Path: Sand, gravel or similar subsurface (e.g. forest pathway, field track)
- Prepared hiking trail: No or not many roots, sleepers, stones, ledges etc.
- Unprepared hiking trail: Roots, sleepers, stones, ledges etc.
- Sports park: Area specially designed for free riding, downhill, 4X and dirt bikes
   Free riding: Artistic and athletic use, rapid descents in open terrain.
- Downhill: Descents on tracks specifically designed for this purpose at high to very high speeds.4X and dirt bikes: similar tracks for BMX bikes



## Risk of Personal Injury and Material Damage!

Your safety on these roads and tracks depends on your speed.

In the case of jumps and high speed there is basically a risk of falling. Only jump and ride at high speed when you have firmly mastered this riding technique.

The higher your speed, the bigger is the risk you take!

Please note that all roads and paths may be damaged and/or have obstacles which may adversely affect your riding safety and damage your bicycle.

In such locations ride particularly slowly and carefully. Push or carry your bicycle over such subsurface if necessary.

#### 2 MTB/ROAD BIKE/TREKKING

- When riding your bicycle at high speed, with a sporty riding style (e.g. riding fast over edges, speed reduction ramps, bumps, etc.), or in the bike park, there is always an increased risk of falls.
- Only ride at high speeds if you can control your bicycle in every situation.
- Adjust the use of your bicycle to your riding skills
- Adjust your bike to for the required use and your riding ability, and use the appropriate protective equipment.

### 2.1.4 In what condition must your bike be when you ride it?

equipment and may not be used on public roads unless equipped to StVZO specification. In order to meet current StVZO requirements your bike must have the following equipment fit listed here in extract form.

Your new bike is an item of sports

- Please take the full wording of the regulations for trips in Germany from the StVZO or consult your dealer.
  - You will find the exact legal guidelines with detailed information online under the following address:

    http://www.qesetze-im-internet.de/stvzo/

When using outside Germany please observe the traffic regulations prevailing in your country. For this please consult your dealer or the competent authority.

- Two independently operating brakes
- A bell

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- Dynamo-powered lighting for front (whitel light) and rear (red light)
- Racing bikes under 11 kg are exempt from the dynamo regulation.
  - Racing bikes exempt from the dynamo regulation must carry battery-powered lighting in the daytime.

- For the duration of participating in races racing bikes are exempt from this regulation.
- White front reflector (often integrated into the front headlight) and a red reflector at the rear
- Two yellow reflectors each for the front and rear whhels; alternatively Tyres with reflective stripes on both sides
- Two yellow reflectors for both right and left pedals
- All lighting components and reflectors

  I must be officially approved.
- Approval can be recognised by a "K", marking, a wavy line and a multi-digit number.
- For regulation fitting of these parts please consult your dealer.

#### 2.1.5 Accessories and modification



# Risk of Personal Injury and Material Damage!

Many cyclists like to modify their bikes and to custom them to their particular wishes. Saddles, handlebars, pedals, brakes, tyres and suspension elements -there are may possibilities for changing your bike subsequently.

Working on bikes, including work which is assumed to be very simple, requires sound training, sound knowledge and a great deal of experience.

Unprofessional work on your bike can lead to dangerous riding situations, falling, accidents and material damage.

- Only use accessories that have been certified according to EN standards. Bike computers and bottle holders are an exception, provided they were selected and fitted by a specialist dealer.
- Consult your specialist dealer when choosing accessories for your bicycle.

- Our company prohibits replacing the front fork for modification purposes. If replacing the fork becomes necessary during repairs, only a fork may be used that is identical in construction and has been approved by our company for your bicycle model.
   Consult our authorized specialist dealer.
- The retrofitting of electrical drives to any of our bicycles is not allowed.
- Any part of your bicycle must not be changed with regard to its condition.
- Have all fitting of parts, modifications, servicing and any other work carried out only by your specialist workshop.
- Please note that the person who carries out the changes on the bicycle is also liable for them.

## 2.1.6 Transport of children, baggage, bicycle trailers



# Risk of Personal Injury and Material Damage!

The transport of children and baggage is accompanied by certain risks. Many bicycle frames are not suited for the fitting of bicycle racks and child seats.

Only transport your baggage in/on suitable carrying systems. These can be bicycle backpacks or bicycle racks that have been approved by the manufacturer. Please consult your specialist dealer on this matter.

Bicycle racks may only be fitted to mounting elements intended for this purpose (see picture below) of the following series/models.

- Cross
- Trekking/City
- MTB with mounting option intended for this purpose
- Child seats may only be fitted to suitable bicycle racks. Please consult your specialist dealer on this matter.

• The maximum additional load amounts to 25 kg.

#### WARNING:

Some bicycle racks have a lower admissible additional load.
Please refer to the specifications provided by the manufacturer of the bicycle rack.

- admissible total weight even with your children and/or baggage (see chart in chapter 3.2).
- Ensure a safe loading. No item of the baggage may come in touch with the moving bicycle parts (running wheel, drive, chain, brakes) or may interfere with the functions or the handling of your bicycle.
- Do not exceed the admissible total weight, see chapter 3.2.
- Determine the admissible total weight by lifting your bicycle up, including the entire additional load (not including your children) and the weight of y Make sure that you do not reach the our bicycle clothing, and by standing on an officially calibrated scale while lifting your bicycle up.
- Please determine the weight of the children by using bathroom scales and add their weights to the total weight.
- Additional loads will affect the bicycle's riding behaviour.
- Additional loads will result in a longer braking distance.
- Adjust your riding style accordingly!
- The fitting and use of bicycle trailers on our bicycles is not allowed, provided they have not been specifically approved for the respective bicycle model.

#### 2.1.7 Roller training



## Risk of Personal Injury and Material Damage!

#### **Roller training:**

The use of roller trainers that are fixed tightly to the frame, the handlebar or the fork can damage your bicycle.

The use of roller trainers which are fixed tightly to the bicycle's fork, handlebar or frame is not allowed.

Carbon frames are generally only suitable for the use on a free roller trainer (no fixation).

#### 2.2 Other hazards

### 2.2.1 Hazards caused by faulty final assembly



Risk of Personal Injury and Material Damage!

Unprofessional final assembly of this bike can lead to dangerous riding situations, falling, accidents and material damage.

Have correct final assembly and adjustment of the right seat position for you confirmed by your dealer. Use the printed form in this Owner's manual on.

#### 2.2.2 Hazards caused by improper use



# Risk of Personal Injury and Material Damage!

Unprofessional final assembly of this bike can lead to dangerous riding situations, falling, accidents and material damage.

- Please observe the instructions set out in chapter 2.1.3
- Always check if your bicycle meets the requirements of the intended use (see chapters 2.1, 4.1.

#### 2.2.3 Risk of burns



Risk of Personal Injury and Material

Damage!



#### **Risk of burns!**

After long descents, the bicycle rims and brake disks can get very hot.

- Do not touch the rims or brake disks immediately after a descent.
- Let the rims and brake disks cool down before you touch them.
- In order to check the temperature, touch the rims and brake disks very briefly with your bare finger. If they are hot, wait a few minutes and repeat the test until the rims and brake disks have cooled down.

#### 2.2.4 Other hazards and safety notes



# Risk of Personal Injury and Material Damage!

Failure to observe the instructions contained in this Owner's Manual may result in dangerous riding situations, falls, accidents and material damage.

- Comply with the applicable traffic regulations of your country.
- Wear a helmet when cycling.
- Cycle defensively and with foresight.
- Do not cycle under the influence of alcohol.
- Cycle in a manner that ensures you have control of the bicycle at all times and that you will not get into difficulty in sudden dangerous situations.
- When cycling make sure that you wear suitable clothing that does not restrict the operation of the bicycle or impair your vision.
- Wetness can affect the efficiency of the brakes. The braking distance is increased.
- Only cycle wearing tight-fitting leg wear.
   Baggy clothing can get caught in the bicycle and lead to serious accidents.
- Do not exceed the admissible total weight, see chapter 3.2.
- Please refer to the care and maintenance information in sections 12 and 13.



# Risk of Personal Injury and Material Damage!

Spinning running wheels can injure your hands and other body parts.

- Keep your hands and other body parts away from spinning running wheels!
- Keep your hands and other body parts away from moving parts (e.g. suspension, steering lever, brakes, ...)!
- Make sure that children on possibly fitted child seats can not touch any spinning running wheel or moving parts.

#### 2.3 Disposal

- Dispose of your bike properly at the end of its life.
- Ask your dealer or contact to a recycling center.

# 3 Included with your bike and Technical Details

#### 3.1 Scope of supply

 Complete bicycle, partially without pedals or

#### Frame set

including the Owner's Manual and delivery certificate as well as all other relevant instructions of manufacturers whose parts were used for the bicycle.

In case of carbon frames or pedelecs, please observe the instructions set out in the additional Owner's Manual.

#### 3.2 Technical data

Admissible total weight

Bicycle including entire additional load

! and attachment parts

Body weight incl. clothing and baggage (backpag)

	Racing bicycle	115 kg
	MTB:	115 kg
	Trekking bicycle:	115 kg + 25 kg equipped
ermissible otal weight	Trekking bicycle fully equipped	115 kg + 25 kg equipped
	Child's bike up to 16" (*)	30 kg
	Child's bike up to 20" (*)	105 kg
	BMX	105 kg

(\*): 16" or 20" indicates the wheel size.

This is indicated on the tyre Please consult your dealer.

Please note that the use of light-weight components, e.g. special running wheels, will reduce the load carrying capacity of the whole bicycle.

For further information, please refer to the parts instructions provided by the respective manufacturer.

#### Example 1:

Wheel sets for a racing bike with an admissible total weight of 90 kg will decrease the admissible total weight of the racing bike from 115 kg to 90 kg.

#### Example 2:

Bicycle racks with an admissible total weight of 20 kg will decrease the admissible weight of the trekking bike from 140 kg to 135 kg.



### Risk of Personal Injury and Material

#### Damage!

New technical findings can result in changes to the models, their technical data and even in entirely new models.

- Please observe the separate instructions, if available.
- Please consult your specialist dealer regarding the actuality and validity of this Owner's Manual.

#### 3.3 Torques of screw connections

	Manufac-			Type of	
Part	turer	Model/Type	Connection	Connection	Torque (Nm)
	Syntace	P6		2 screws	6-8
	Easton	EA30		2 screws	8
seat post	RFR		clamping	1 screw + 1 putting wheel	8-10
	Scape		saddle	2 screws	8-10
	FSA	SL-280		1 screw	16,5
	Triathlon	aluminium		2 screws	8-10
	Ritchey	TT Stubby		1 screw	12
seat post	Triathlon	carbon	clamping saddle sledge	2 screws	5-6
		aluminium		1 screw	5-8
		titanium		1 screw	5-8
		carbon frame		1 screw	5-6
seat post clamp / frame		carbon seat post	clamping seat post		5-6 please also refer to seat post manual
		Tria aluminium		2 screws	4-5
		Tria carbon		2 screws specification 1 screw	2-3 2-3
bottlecage / frame	any	any	screw joint bottle cage	2 screws	3
cable guide clamp	any	any		each screw	3
rear carrier	any	any	screw joint rear carrier	each screw	6

### 4 Assembly and function

#### 4.1 Categories

We divide our bicycles into the following categories. Within these categories, there are different series.

- Mountain bike
  - Fully (= front and rear wheel suspension, see also chapter 4.2.1)
  - Hardtail (= front wheel suspension, no rear wheel suspension, see also chapter 4.2.2)

- Cross bike
- Cyclocross
- Racing bike
- Fitnessbikes/ Urban
- Trekking bike Pedelec

You will find the category and model further
information of your bicycle in delivery certificate, last page of this maunal.

During the purchase, please check if eve-! rything has been filled out completely and correctly with the help of your bicycle dealer.

#### 4.2 Mountain bike

Not equipped in accordance with StVZO, derailleur gear, rim or disk brakes, running wheels with rim dia meter of 26 inches (559 mm) or 29 inches (622 mm).

#### 4.2.1 Fully

Fully refers to mountain bikes with front and rear wheel suspension whose range of application is defined by the spring travel and the equipment. The range of application (see chapter 2.1.3) must be defined together with your specialist dealer.





#### 4.2.2 Hardtails

Hardtails refers to mountain bikes with front suspension whose range of application is defined by the spring travel and equipment. The range of application (see chapter 2.1.3) must be defined with your specialist dealer.





#### 4.3 Crossbike

Has the same equipment characteristics as mountain bikes, running wheels with a rim diameter of 28 inches (622mm) and a tyre width of up to 42 mm.





#### 4.4 Racing bike / Triathlon

Not equipped in accordance with StVZO, derailleur gear, rim breaks, running wheels with rim diameter of 28 inches (662 mm).





#### 4.5 Cyclo-cross

Not equipped in accordance with StVZO, derailleur gear, running wheels with rim diameter of 28 inches (662mm).

#### **Additional features:**

- lug tyres
- cantilever or disk brake



#### 4.6 Fitness bikes / Urban bikes

Not equipped in accordance with StVZO, derailleur or hub gear, running wheels with rim diameter of 28 inches (662 mm).



#### **Additional features:**

- straight handlebar or handlebar similar to mountain bike
- tyre with 25 mm to 42 mm
- rim or disk brakes



#### 4.7 Trekking bike

Equipment in accordance with StVZO, equipped with derailleur or hub gear, rim brakes, backpedal brakes or disk brakes, bicycle rack, splashguard ("mudguards"), running wheels with rim diameter of 28 inches (662mm).

#### **Additional features**

- tyre width of up to 42mm
- lighting equipment, reflectors and bell



#### 4.8 General information

#### 4.8.1 Brakes

Your bicycle is equipped with one or two in dependently operated rim or disk brakes (see chapter 4.1 - 4.7).



# Risk of Personal Injury and Material Damage!

Incorrect operation of the brakes can lead to hazardous riding situations, falls, accidents and material damage.

- Familiarise yourself with the operation of the brakes.
- Determine which brake lever operates the front brake and which one operates the back brake.
- Operate the respective brake lever several times in the static position. You can observe opening and closing action of the brake blocks or brake calipers on the respective disk or rim.

#### 4.8.2 Gear shift

#### Your bicycle is equipped with

 a derailleur gear and a crank set with one, two or three chainwheels. This gear shift will provide you with the optimal gear for every.

- speed and will, for example, enable you to ride uphill more easily.
- This is how you can determine the number of gears: Derailleur gear: Multiply the number of the front chainwheels with the number of sprocket wheels in the back, e. g. 2 chainwheels x 10 sprocket wheels = 20 gears.
- Hub gear: Please take the indication on the hub shell or on the gearshift lever into account.

#### 4.8.3 Frame and fork

### Bicycle frames are available in the following versions:

- without suspension: rigid fork and rigid frame, available for the following series
  - Racing bike
  - Cyclo-cross
  - Fitness / Urban
  - Trekking (not all models)
- semi-suspended ("hardtail"): with suspension fork und rigid frame, available for the following series
  - Mountain bike
  - Cross
  - Trekking (not all models)
- fully suspended ("Fully" or "Full Suspension"): with suspension fork and rear wheel suspension.

There are different suspension systems with different numbers of joints for bicycles with full suspension.



#### four-joint frame

You can easily count the number of joints. The support for the spring element is not considered a join.

### 4.9 frame material / information on carbon material

Modern bicycle frames consist of aluminium alloys, carbon, steel or titanium.

You can find your frame material under point 16, in the handover certificate, or by consulting your specialist retailer.



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#### Gefahr von Personen- und

#### Sachschäden!

Carbon is a modern material used in bicycle and vehicle construction. However, carbon components are highly sensitive. Errors in its assembly or use could lead to breakages and therefore hazardous driving conditions, falls, accidents and material damage.

- It is imperative that you observe all of the following information regarding the use of carbon parts.
- Should you have any questions relating to the use of carbon parts, please consult your specialist retailer.



# Risk of Personal Injury and Material Damage!

Shock and impact loads which may occur as a result of unintended use (see chapters 2.1.3 and 4.1) or stone-chipping, may lead to inconspicuous damage in the carbon fibres and/or delamination (= a dissolution of the bonded carbon layers).

Such damage, combined with the forces arising from the operation of the bicycle can suddenly break carbon parts and therefore lead to dangerous driving conditions, falls, accidents and material damage

- Your bicycle must solely be used for the intended purpose (see chapters 2.1.3 and 4.1)
- After falls or other large mechanical stresses which are not prescribed under the normal biking operations, carbon frames and components should no longer be used.
- Please consult your authorised specialist retailer immediately after a fall.

Carbon is a more commonly used term for carbonfibre reinforced plastic. This describes a fibre-plastic composite material in which the carbon fibres are embedded in several layers in a plastic matrix.

### 4.9.1 Information on frame construction

These high-end products are produced by hand.

Deviations in finish may therefore occur, however, this represents no grounds for complaints.

### 4.9.2 How to use your carbon parts correctly

- Do not, under any circumstances, mount brackets, screws, clamps or other elements which exert mechanical pressure on the carbon tube.
- 2. Clamping onto bike stands or other wall brackets:
- Never clamp your bicycle around the carbon tube or carbon seatpost in the clamping jaws of a bike stand.
- Please take care when using shackle locks! These may, under certain circumstances, cause damage to your frame.
- When using shackle locks, please ensure that these only touch the respective carbon tube at the most, and are not exerting pressure.

#### 4. Saddle clamp / seatpost:

- The prescribed tightening torque of the saddle clamp bolt is 5-6 Nm.
- The seat tube must not be scoured or mechanically processed in any other way.
- Please consult your authorised specialist retailer immediately after a fall.
- The seatposts and seat tubes must not be lubricated. Only a carbon assembly paste may be used.
- Aluminium seatposts may only be mounted using a carbon assembly paste.
- The seat clamp may not be closed if the seat post has been removed.

#### 5. Bottle holder:

 The thread sets are provided for attaching standard bottle holders. The maximum tightening torque of the screws for attaching the bottle holder to the frame is 4 Nm.

#### 6. Bicycle rollers

 The use of bicycle rollers with fixed clamps is not permitted. By firmly restricting the dropouts and quick-release hub axles, mechanical stresses occur which strongly exceed those permitted for normal cycling operations. This may result in damage to the bicycle frame.

#### 7. Transport:

- Due care must be taken when transporting wheels with carbon frames.
- The frame should particularly be protected against contact with other parts using a cover for example.
- No carrier or other such systems which use clamping elements for fixing and mounting may be used. These clamping forces may lead to damage of the tubes or dropouts.
- Do not place any objects on the frame.
- Please ensure that the bicycle is in a fixed and stable position during transport.

### 5 Bicycle frame / Bicycle frame set



# Risk of Personal Injury and Material Damage!

An incorrect mounting of the frame may result in severe injuries caused by falling!

You can purchase some of our bicycle frames separately and can have them assembled according to your individual wishes. Please make sure to consider the following important notes.

 The assembly of our frames may only be carried out by specialist dealers that have beeb authorized by us.

- The person assembling the frame into a complete bicycle is considered to be the manufacturer and is liable for any possible assembly faults and defects.
- This Owner's Manual is not an assembly instruction for your bicycle frame.
- Only use trademarked equipment that has been certified according to EN standards and is suitable for this frame for the assembly. You can recognize the right equipment with the help of the included documentation containing the following information:
  - manufacturer information with complete address.
  - information regarding conducted inspections and inspection guidelines with EN number.
  - detailed and clear product information and assembly notes in your national language.
- If you have questions regarding suitable accessories, please consult your specialist dealer.
- Please consider the information regarding front forks in chapter 2.1.5



# Risk of Personal Injury and Material Damage!

Only rigid and unsprung front forks that have been approved by our company may be built into the frame. Please consult your authorized specialist dealer.

- Racing bike, all models
- Fitness / Urban, all models
- Cyclo-cross, all models
- Trekking with rigid fork geometry, all models

### Before using for the first time



### Risk of Personal Injury and Material Damage!

An unroadworthy bike can lead to dangerous riding situations, falling, accidents and material damage this same danger exists if you are not yet familiar with your new bike and its controls.

- Make a check of your bike after item 7
- Familiarise yourself with this bicycle before you first ride it. In particular check with brake lever operates the front brake and which the rear - see Section 4.8.1
- Modern brakes have a very powerful braking effect. Excessively strong operation of the brake levers can cause the respective wheel to lock and can therefore lead to a fall. Familiarise yourself slowly with the braking effect on your bike in a safe area of land.
- In a safe location, slowly test and become accustomed to your bicycle's braking response
- With new rim brakes and after replacing brake blocks the full braking effect only develops after a certain run-in period. Please note therefore your initially greater braking distances.
- Disk brakes need to be initially run in. Full braking efficiency only develops after the running-in process. Please note the enclosed brake manufacturer's running-in instructions.
- If your bike is fitted with optional click-in pedals which firmly connect the shoe with the pedal: Practice using them by mounting and dismounting. Click-in pedals are not safety pedals.
- If after purchasing you remove the saddle support and front and/or rear wheel for transportation please follow the appropriate instructions in Chapter 11.
- 1. Have your dealer confirm proper final assembly and the roadworthiness of your bike. Have your dealer adjust the correct saddle position.

- You can make fine adjustments and minor changes yourself as described in Chapter 8.2-8.3 "Adjusting the saddle
- Ţ position".
- 2. Only use this bike when your dealer has familiarised you with your bike's technical features in a briefing.
- 3. Seal you bike with aerosol wax polish, see Chapter 11.
- 4. Before using read Chapter 8.

### Before every trip



### **Risk of Personal Injury and Material** Damage!

An unroadworthy bike can lead to dangerous riding situations, falling, accidents and material damage

Also consider the possibility that your bike may have fallen over when unattended or that someone might have tampered with it.

- Check that your bike is roadworthy before every trip.
- Memorise your bike's correct condition when new so that you will later be able to recognise deviations from the correct condition (photos you take yourself can be a valuable aid).
- Immediately contact your specialist dealer if you discover that the actual state of the bicycle deviates from its specified condition.
- Only ride your bicycle again, if it has been properly repaired by the specialist dealer.
- The parts described in the next subchap-Ţ ters are not built into all bicycles. Some parts may also have been retrofitted.

Determine the equipment of your bike with the help of the information in chap-Ţ ter 4 and the following pictures. Carry out the corresponding inspections.

If you are unsure or in case you have questions, please consult your specialist dealer. Only ride the bike again after it has been properly readjusted by the dealer.

#### 1. Visually inspect the whole bike:

- Check all fixing screws for correct tightness (see Chapter 3.3)
- Check the entire bike for dents, ruptures, deep scratches and other forms of mechanical damage.
- Contact your dealer if visual inspections shows defects of any description.

#### 7.1 Check the road wheels

Front and rear wheels are both called road wheels.

#### A road wheel consists of:

- the hub,
- On the rear wheel hub only Sprocket or sprocket cassette,
- Brake disk, if fitted,
- Spokes
- Rim and the Tyre equipment, which in turn consists of
  - Tyre casings,
  - Tube and
  - Rim tape insert

### Currently, there are three different types of tyre:

Wired-on tyres or folding tyres: This most common type of tyre consists of the following components:

- tyre
  - If there are any loose parts:
  - rim tape (only for rims with spoke holes)

Inside the tyre, there is a wire or a pad that attaches itself to the rim flange when the tyre is inflated.

Field of application: All categories.

#### Tubeless tyres:

Special rims (with or without hermetically sealed spoke holes) and tyres form an airtight seal and make the use of a tube unnecessary. However, a tube can still be fitted in case of a breakdown.

Field of application:

Mountain bikes, cross bikes, racing bike/

#### Tubed tyres:

The tube is sewed into the tyre. During assembly, the tyre including the tube is glued to a rim specifically designed for this purpose. The assembly instructions of the tyre, glue and rim manufacturers must be observed in this context. Please also consider the notes in chapter 7.1.3.

Field of application: Racing bike/street

Information on the type of tyre and the tyre size are provided in chapter 16, delivery certificate, or can be obtained by consulting your specialist dealer on this matter.

Bicycles which are equipped according to StVZO may be fitted with rim reflectors.

#### 7.1.1 Check fitting

- Shake both road wheels vigorously at right angles to the direction of travel.
- The road wheels must not move in the forks.
- The quick release must be closed (see Chapter 8.8).
- There must be no audible creaking or rattling sounds.
- 2. Contact your dealer if this check shows defects of any description

#### 7.1.2 Check the rims



## Risk of Personal Injury and Material Damage!

Worn rims and/or substantial warping or run-outs may lead to hazardous riding situations, falling, accidents and material damage.

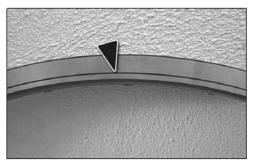
 Worn rims must be replaced and warping or run-outs repaired!



# Risk of Personal Injury and Material Damage!

With rim brakes: Dirty rims may reduce braking efficiency.

- Dirty rims must be cleaned immediately.
- Check rims for wear:
   Rims with wear indicators:
   Visual check





#### wear indicators



### Rims without wear indicators:

#### Visual check

- Fingernail check: Run your fingernail across the rim shoulder. No scoring should be felt.
- If the wear indicator is no longer visible or if the rim has discernible scoring the rim must be replaced.

#### 2. Check rims for run-out:

- Lift the bike up and spin first the front and then the rear wheel.
- Note the distance between the rim and the brake shoes and on disk brakes the distance between the rim and the frame strut or fork leg.
- Check your rims for dirt, especially oil and grease.

Dirty rims must be cleaned immediately (see Chapter 12).

#### 7.1.3 Check tyres



## Risk of Personal Injury and Material Damage!

Does not apply to tubeless tyres.

In the event of angled valve the base of the valve can rip off when riding which causes sudden loss of tyre pressure. This can lead to hazardous riding situations, falling, accidents and material damage.

- Have the tyre seating corrected by a specialist workshop.
  - You can undertake this job yourself if you are familiar with fitting and removing the road wheels (see Chapter 11.1) and replacing the tyre and tube
- Remove the valve nut.
- Check the valve position:
   The valves must point directly towards the centre axis of the road wheel.



The valves must point directly towards the centre axis of the road wheel.



Valve does <u>not</u> point to the traversing wheel centre

#### Check the tyre pressure:

Determine your tyre type

Mountain bikes can be fitted with racing bike type tyres and racing bikes with trekking tyres.

#### Rule of thumb:

Mountain bike tyres: Tyre width greater than 40 mm Trekking / Cross-country and

Fitness bike tires: Tyre width from 28 mm - 40 mm Racing bike style tyres: Tyre width less than 28 m Consult your dealer to determine your tyre type.

#### **Pressures:**

- Mountain bike tyres: 2.5 3.5 barr
- Trekking bike tyres: 3,5 5,0 bar
- Racing bike tyre: 6,0 10,0 bar
- For the correct air pressure for categories not listed here, please refer to the information on the tire or consult your dealer.



### Risk of Personal Injury and Material Damage!

Too low a tyre pressure leads to increased likelihood of punctures but mostly dangerous handling.

The tyre can come off the rim on bends and cause wandering of the tyre on the rim.

This can lead to hazardous riding situations, falling, accidents and material damage.

Inflate your tyres to the correct pressure.

#### Many tyre pressures are given in "psi". Convert the pressure using the following table.

psi	30	40	50	60	70	80	90	100	110	120	130	140
bar	2,1	2,8	3,5	4,1	4,8	5,5	6,2	6,9	7,6	8,3	9,0	9,7

The actual permissible tyre pressure can be found in the tyre and rim manufacturer's instructions. The permissible tyre pressure is mostly embossed on the tyre wall. Please consult your dealer.

### The higher your body weight the higher the tyre pressure needs to be.

- Check the tyre pressure with a tyre pressure gauge. Simple gauges are often included with bicycle tubes and higher quality gauges are available from your dealer. How to use them is either in the instruc tions for used or you can have your dealer demonstrate this.
  - If pressure is too low: Increase the pressure by inflating with a suitable pump.
  - If pressure is too high: Release sufficient air via the valve and check the pressure again afterwards with a gauge.

Using a bicycle pump with a pressure gauge you can check the pressure whils inflating the tyre.

Let some air out of the tyre first and then increase the pressure to the desired level.

There are various types of valve. All valves can be fitted with a dust cap. After removing the cap you can place the pump head directly on the valve in the case of either a Schrader valve or the so-called Presta valve. On a racing bike valve you must first screw the little locking screw out of the valve until the stop and tighten it again after inflating the tyre.

• Get your dealer to demonstrate operation of the valves to you.



#### Checking your tyres for external damage and wear:

- The tyre rubber must have the same pattern as the original over its entire surface.
- The tyre canvas beneath the layer of rubber must not be visible.
- There must be no bulges or tears.

#### Checking the fit of your tyres:

- Lift the front or rear road wheel and turn it by hand
- The tyre must be round when running. There must be no highs or lows.

#### 7.1.4 Other checks

 Check your road wheels for loose items such as, for example, pieces of branches, residues, loose spoke reflectors etc.

#### If loose parts are available:

- Remove these if this is possible without applying any great force.
- Check if your road wheels have been damaqed by these loose items.
- Tighten loose bicycle parts such as spoke reflectors, for example. If you find this is not possible contact your dealer immediately.
- Please note that all reflectors are present as per StVZO (see Chapter 2.1.4), correctly secured and not obscured or dirty.

#### 7.2 Check saddle and saddle post



### Risk of Personal Injury and Material Damage!

If the saddle post is not inserted far enough the saddle post can come loose.

This can lead to hazardous riding situations, falling, accidents and material damage.

- Note the correct saddle post insertion distance. Please read Chapter 8.3 for information.
- If you have the correct technical know-ledge you can tighten this yourself.
- Please read Chapters 8.2, 8.3 and 11.2 for information.

### Check the saddle and saddle post for tightness:

Try to twist the saddle and seat post by hand. It should not be possible to twist the saddle and/or seat post.



Try to move the saddle in its clamp with alternate up and down movements. It should not be possible to move the saddle.



If either the saddle and/or the saddle post can be moved tighten them (see Chapters 8.2, 8.3, and 11.2.

#### 7.3 Handlebars, check stem



## Risk of Personal Injury and Material Damage!

Handlebars and stem are very important components in terms of your riding safety.

Damage to them and mistakes during assembly can lead to very severe falls.

- If you discover any faults with these parts or have doubts about them you must under no circumstances continue to use your bike.
- Contact a specialist workshop immediately.
- 1. Check the handlebar and stem assembly.
- The stem must be parallel to the front wheel rim.
- and the handlebars must be at right angles to it.
- In the case of a shaft stem the "Max" or "Stop" or similar marking must not be visible.
- Grip the front wheel between your legs.
- Grip the handlebars at both ends.
- Try to twist the handlebars in either direction by hand.
- Try to twist the handlebars in the stem by hand







- It must not be possible to twist or slide any of the parts.
- There must be no audible creaking or rattling sounds.

#### 7.4 Check handlebar-mounted parts

- Check the gearshift/brake levers, grips (straight handlebars only) and triathlon rest (triathlon bikes only) for correct fit:
- Grip the front wheel between your legs.
- Try to twist the brake levers by hand.





#### **Triathlon essay**

- Grip the front wheel between your legs.
- Try to twist the gearshift/brake levers out of position by hand.
- Try to pull the handgrips from the handlebars (straight handlebars only).
- It must not be possible to twist or slide any of the parts.
- There must be no audible creaking or rattling sounds.
- In case a bell has been fitted to the handlebar, it must easily be reached with a finger or a thumb and it must not be possible to move it.

#### 7.5 Check the forks bearing

- The forks bearing is the forks bearing in the fork stem.
- Check your forks bearing. The front wheel must swivel easily in both directions with no play:
- Stand beside your bike and hold it with both hands by the handlebar grips.
- Pull the front brake lever and keep the brake applied.
- Push your bike forward and backward in short, jerky movements.

- There should be no play in the forks bearing: No clicking should be hear or felt.
   Creaking noises are also impermissible.
- Lift the hold bike up so that the rear wheel is higher than the front wheel.



• Move the front wheel by steering to the side and let it go again.



- The front wheel must automatically return to its original position.
- The front wheel must not lock in any position.

#### 7.6 Check suspension forks

#### 1. Check your suspension forks:

- Pull the front brake lever and keep the brake applied.
- Press with your body weight on the handlebars so that the suspension forks deflect.
- The forks must spring easily up and down

- There must be no audible creaking or rattling sounds.
- Stick the front wheel between your legs and try to pull up the bicycle at the handlebar.
- The standpipes mustn't break loose from the diving pipes or from the fork bridge.
- Please regard the hints in the separate instruction manual for your fork.

#### 7.7 Check the rear wheel suspension

#### 1. Check your rear wheel suspension:

- Sit on your bike and activate the suspension in a standing position using vigorous up and down movements.
- The rear of the bike must spring easily up and down
- There must be no audible creaking or rattling sounds

#### 7.8 Check the brakes

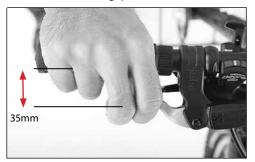


# Risk of Personal Injury and Material Damage!

Brake malfunctioning is a danger to life.

- Check your brake system particularly carefully.
- When touring for several days brake disk, brake blocks and brake pads can wear a lot.
- When touring like this carry spare brake blocks and replacement pads with you.
- Only replace them yourself if you are familiar with this job. Please consult your dealer.

- If you cannot replace them yourself have them done by a trained specialist.
- Checking the function of your brake system:
- In a static position operate both brake levers until the brakes make firm contact.
- Please note that in this position the minimum distance between the brake lever and the handlebar grip must be at least 35 mm



 Try to push the bike with the brakes applied in this way.
 Both wheels must remain locked.

### 7.8.1 Check rim brakes and cable (racing bike version).

1. Check the brake cables and their clips:

#### Racing bike rimbrake



- The brake cables must not be damaged or corroded.
- On cable brakes the brake cables must be securely clipped along their entire length.



- 2. Check correct fixing and screw connections of the entire brake system:
- Try to pull the brakes from the forks (front) and from the frame (rear) by hand.
- It must not be possible to pull the brakes off and there must be no play in the fixing bolts.



3. Check operation of the brake shoes.



- With the brake applied the brake shoes must be in contact with the rim shoulder along their entire length.
- Under no circumstances must the brake shoes touch the tyre even when the brake is not applied.

#### 4. Check the brake block wear.

• The brake blocks must not be worn down beyond the wear indicator.



#### Check centring of the brake shoes.

 The brake shoes must be equidistant from the rim on both sides

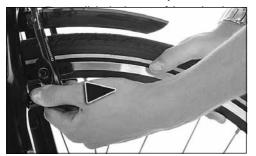
## 7.8.2 Check rim brakes and cable (mountain bike version).

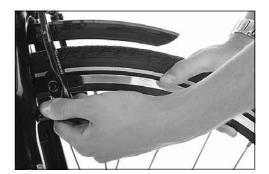
#### 1. Check the brake cables and their clips:

- The brake cables must not be damaged or corroded.
- On cable brakes the brake cables must be securely clipped along their entire length.



2. Check correct fixing and screw connections of the entire brake system:





 It should not be possible to loosen the brakes from the sockets by hand. A small amount of play is normal.

#### 3. Check operation of the brake shoes.

 With the brake applied the brake shoes must be in contact with the rim shoulder along their entire length.

#### 4. Check the brake block wear.

- Under no circumstances must the brake shoes touch the tyre even when the brake is not applied. Unhinge the brakes (see Chapter 11.1)
- The brake blocks must not be worn down beyond the wear indicator



#### 5. Check centring of the brake shoes.

 The brake shoes must be equidistant from the rim on both sides.

#### 7.8.3 Check hydraulic rim brakes



### Check correct fixing and screw connections of the entire brake system:

- Try to pull the brakes out of the sockets by hand
- It should not be possible to loosen the brakes from the sockets by hand.
   A small amount of play is normal.

#### 2. Check your brake system seals:

- Operate each brake lever in a static position and hold the brake lever in that position.
- Check the brake system from the brake lever along the lines to the brakes.
- There must be no egress of hydraulic fluid at any point

#### 3. Check operation of the brake shoes:

- With the brake applied the brake shoes must be in contact with the rim shoulder along their entire length.
- The brake shoe must never touch the tyre even if the brake is not applied.



#### 4. Check the brake block wear.

 The brake blocks must not be worn down beyond the wear indicator.

#### 7.8.4 Check hydraulic disk brakes



## Risk of Personal Injury and Material Damage!

Dirty brake disks may reduce braking efficiency.

• Dirty brake disks may reduce braking efficiency.



### Pull the brake calliper alternately in all directions.

It should not be possible to move the caliper.

#### 2. Check your brake system seals:

- Operate each brake lever in a static position and hold it.
- Check the brake system from the brake lever along the lines to the brakes.
- There must be no egress of hydraulic fluid at any point.

#### 3. Check brake disk for damage:

- There must be no grooves, ruptures, deep scratches or other mechanical damage.
- 4. Lift the front or rear road wheel and turn it by hand:
- The brake disk must only have a slight axial run-out.

- Have the brake pad and brake disk wear checked at a specialist workshop (see here also Chapter 11):
- The brake pads must not be worn down beyond the wear indicator.
- The brake disk must not be below the minimum thickness.
- You can find the minimum thickness in the accompanying component operating instructions
- Check your brake disks for dirt, especially oil and grease.
- Dirty brake disks must be cleaned immediately (see Chapter 11)
- When touring for several days brake disk, brake blocks and brake pads can wear a lot.
- When touring like this carry spare brake blocks and replacement pads with you.
- Only replace them yourself if you are familiar with this job. Please consult your dealer.
- If you cannot replace them yourself have them done by a trained specialist.

#### 7.8.5 Check back-pedal brake

- 1. Ride at walking pace.
- Tread "backwards" against the direction of drive.
- The rear wheel must be able to be braked sharply in this way.

#### 7.9 Check drive train and chain

- Turn the right hand crank counter clockwise and note the chain rings and the pinion cassette.
- The chain rings and pinions must have no axial run-out.
- There must be no debris present. Remove the latter if this is easily possible.
- 2. Press the left crank in the position shown against the chain stay.



- You should feel no play.
- There must be no audible creaking or rattling sounds.
- 3. Check the chain for damage.
- At no point on the chain should there be, for example, any damaged chain side fishplates, protruding rivet pins or seized and immobile chain links.
- In a static position turn the right crank counter to the direction of drive and observe running of the chain at the gear change rollers on the change mechanism.
- The chain must run smoothly over the change rollers and must not jump.

#### 7.10 Check lighting set



## Risk of Personal Injury and Material Damage!

Failure of the front headlight and the rear light can lead to dangerous road situations in darkness and/or bad visibility.

 Only use your bike under such condtions if your lighting set is fully functional.

#### 1. Check your lighting system:

- If applicable, please observe the on/off switch on the headlamp.
- Raise the front wheel.
- Turn the front wheel vigourously by hand.
- Front headlight and rear light must operate.
- If applicable, please check that the rear light is functioning correctly.

#### 7.11 Check carrier



# Risk of Personal Injury and Material Damage!

Loose or untightened carrier parts can block the wheel and lead to serious falls.

- Only use your bike again when the splash guard has been attached by a specialist workshop.
- Shake the carrier from side to side by hand. The carrier fixings must not come loose.

The carrier must not touch the tyre.

Checking sidelights for function behind if available.

#### 7.12 Check splash guards (mudguards)



## Risk of Personal Injury and Material Damage!

Loose or untightened splash guard parts can block the wheel and lead to serious falls.

- Only use your bike again when the splash guard has been attached by a specialist workshop.
- 1. Check your "mudguard" fixings.

- The mudguard and its fixing struts must not be broken or damaged.
- In a standing position move the front wheel vigorously from side to side using the handlebars.
- Tilt the whole bike from side to side a few times
- The fixing struts must not loosen.
- No part of the mudguards must touch the wheels.

#### 7.13 Other checks



## Risk of Personal Injury and Material Damage!

An extended side stand can cause heavy falls. Always retract the side stand before riding.

• Always retract the side stand before riding.

#### 1. Check your side stand, if fitted.

- Visually check screws and bolt fixture.
   Always retract the side stand before riding. The side stand must be securely fixed to the frame.
- Always fold the side stand upwards before riding. The stand must also remain in this position during jolting.



### Risk of Personal Injury and Material Damage!

A side stand that is bent, too short or too long does not provide a secure stand for your bicycle.

Your bicycle could fall over and cause injuries to you or other persons.

In addition, your bicycle and surrounding objects such as other bicycles, cars, etc. may get damaged.

- Have the bent side stand be repaired or replaced by a specialist workshop.
- As for side stands with adjustable lengths: Have the correct length be adjusted by a specialist workshop.
- 1. Check your side stand, if existent.

- Visually inspect the screw connection. The side stand must be mounted tightly to the frame.
- Fold the side stand up before every ride. The side stand must not unfold by itself.
- As for side stands with adjustable lengths:
   Check if the extendable part can be moved by exerting hand force on

#### 2. Check the secure stand of your bicycle.

- Lean or place your bicycle in the direction in which the side stand is unfolded.
- Your bicycle must stand by itself.
- When pushed slightly in any direction, your bicycle must remain standing and not fall over.



### Risk of Personal Injury and Material Damage!

Accessories that have not been fitted correctly or that have become loose, can affect your riding safety.

- Check any accessory that is not explicitly listed herein for its proper fixation.
- Immediately contact a specialist workshop in case one of the following requirements is not met.

### 3. Check any accessories that have been retrofitted.

- Visually inspect the screw connections.
- Try to twist or move the accessories out of position by exerting hand force on them.
- Tilt the whole bicycle transversely to the direction of travel and move it back and forth a few times.
- Lift your bicycle up (one or two centimetres) and put it down again.
- The accessories must not be loose, move or twist.
- No part of the accessories should touch the wheels
- A bicycle stand If fitted should not be unfolded.
- There should be no noticeable noise.



# Risk of Personal Injury and Material Damage!

- Damaged bicycle parts can have be sharpedges and injure you.
- Check all the bike parts that you may have contact with during use
- Have damaged parts repaired or replaced immediately by an authorized repair shop.

### 8 Adjusting and servicing your bike

- You can perform some adjustments to your bike yourself.
- Only do these jobs yourself if you have
  the appropriate technical knowledge and
  experience and the right tools for the job.

## 8.1 Adjusting the adjustable stem (optional)



 Many bikes are fitted with an adjustable stem, the height and angle of which can be adjusted. Only have adjustment carried out in a specialist workshop!

#### 8.2 Adjust saddle position

Your saddle will be secured with one or two clamping bolts.

To adjust it you need a hexagonal socket of the right size and a torque wrench.

- To adjust the horizontal position or inclination of your saddle:
- Loosen the clamping bolt(s) a few turns until the saddle can be easily turned and/or in inclination angle adjusted.



- Move the saddle to the desired position.
- For seat clamps with only one fixing screw: Always tighten the seat clamp with the right, prescribed torque. Make sure that all loosened parts join together in correct alignment (see Chapter 3.3.).
- For seat clamps with two fixing screws:
   Tighten one screw just for a quarter or a half
   turn then continue with the other screw
   in the same way. Do this as long as you've
   reached the right torque (see Chapter 3.3.).
- Please notice specified tightening torques from the table in 3.3.

#### 8.3 Adjust saddle height



# Risk of Personal Injury and Material Damage!

A saddle set too high for children who are not yet able to cycle safely without assistance, could cause accidents, injuries and/or property damage.

- Adjust the seats height in a way that the soles of the riders feet can touch the ground even with slightly bent legs when riding.
- On a gripper clamp with bolt you need a hexagonal socket and a torque wrench of the correct size. For a quick-release clamp please see Chapter 7.8.
- Loosen the clamp as described in Chapter 11.2.
- Move the saddle and saddle stem to the desired position. Please note the instructions regarding saddle stem insertion distance in Chapter 11.2.
- Clamp the saddle stem as described in Chapter 11.2.

#### 8.4 Adjust suspension forks

 Please read the instructions for adjusting your suspension forks from the suspension fork manufacturer's component instructions.



 If your forks have a fixed adjustment mechanism as shown in the illustration, please read its instructions in the suspension fork manufacturer's component instructions.

Suspension forks with elastomers and/ or steel springs are only suitable for one overall weight range (= weight of rider + any luggage). This weight range is usually within 20 kg.

Only the forks pre-tensioning can be adjusted by compressing the springs by means of an adjuster screw. This merely changes the initial breakaway torque of the forks.

That is, with greater pre-tensioning the forks only deflect at higher operating forces.

If the forks are pre-tensioned too much suspension travel is accordingly less.

The weight range for which the suspension elements in your forks are suited

can be found in the fork manufacturer's instructions and/or you can consult your dealer.

If your total weight is outside this range have your dealer fit suspension elements matching your weight.

### 8.5 Adjust rear suspension

(on full suspension bikes)

- Please read the instructions for adjusting your suspension/damper elements in the suspension fork manufacturer's component instructions. Please consult your dealer.
- Adjust your suspension/damper element so that the bike when carrying the rider's weight deflects equally at the front and rear wheels.

#### 8.6 Service the gears



Risk of Personal Injury and Material Damage!

Incorrect operation of the gear shift levers can damage your gears.

- Never operate both levers or both gear shift switches at the same time!
- Please note that for the crank set (left-hand lever) and hub gears: Never shift under load!
- Please determine on the basis of the illustrations, which gear shift system your bike has. If you are not sure which one it is please consult your dealer.
- If your gear shift lever is not shown in the illustrations please take this from the accompanying gear shift lever manufacturer's instructions and/or consult your dealer.



Shimano Dual Control



Shimano Rapidfire 2-Way-Release\_Deore



Shimano Rapidfire 2-Way-Release\_XT



Twist Grip Shift



Shimano EZ Fire



Shimano Rapidfire



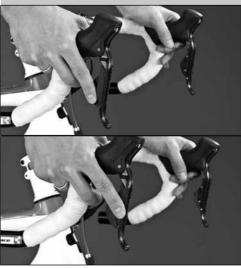
Sram Force / Rival / Red



Shimano STI

- ! The STI connection is mechanical.
- The left-hand lever operates the chain ! ring derailleur and the right-hand lever operates the gear shift.

- When using an electronic derailleur
  gear (called Di2 by Shimano), the shifting is done by pressing buttons.
- ! The Di2 connection is analog.
- For further information, please refer to the specific operating instructions provided by the manufacturer.

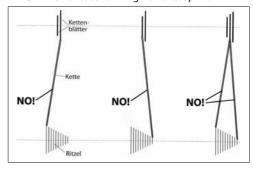


Shimano Di2

- On derailleur systems the gear is shifted by switching the chain to another sprocket
- On the crank set these sprockets are called "chain rings" and on the rear sprocket cassette they are called "pinions".
- 3. Please observe the chain position prescribed as shown above.

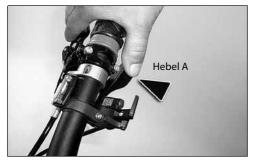
To be avoided:

- Largest chain ring + largest pinion.
- Smallest chain ring + smallest pinion.



# 8.6.1 Shimano Rapidfire/ Shimano Rapidfire 2-Way-Release/ Shimano EZ Fire

On your gear-shift there are two levers. Lever A is for shifting to a larger chain ring or sprocket and Lever B for shifting to a smaller one.





#### Here is how you shift to a larger sprocket:

- In order to shift you must be pedalling.
- Press the lever down with your thumb beyond the first stop and keep it depressed until the desired gear is selected.



 For rapid shifting through several sprockets press the lever right down and keep it depressed until the desired gear is selected.

### 2. Here is how you shift to a smaller sprocket:

- In order to shift you must be pedalling.
- Depress (2-Way-Release only) or pull Lever B until you feel it engage and then release it again straight away.





#### 8.6.2 SRAM gear shift

On your gear-shift there are two levers. Lever A is for shifting to a larger chain ring or sprocket and Lever B for shifting to a smaller one.

#### 1. Here is how you shift to a larger sprocket:

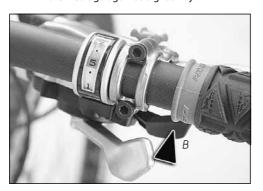
- In order to shift you must be pedalling.
- Press the lever down with your thumb beyond the first stop and keep it depressed until the desired gear is selected.



 For rapid shifting through several sprockets press the lever right down and keep it depressed until the desired gear is selected.

#### Here is how you shift to a smaller sprocket:

- In order to shift you must be pedalling.
- Depress Lever B until you feel it engage and then let it go again straight away.



#### 8.6.3 Twist grip shift

On your shift grip there is a ring which can be rotated in either direction. By turning this ring you shift into the next gear.

Depending on the manufacturer you shift into a higher or lower gear in the one direction of rotation. You can find the precise functioning in the accompanying component instructions and/or consult your dealer.



#### 1. Here is how you shift with hub gears:

- pedalling in order to shift.
- Turn the rotating ring in the desired direction until the gear is selected.

#### Here is how you shift with derailleur gears: to a larger sprocket

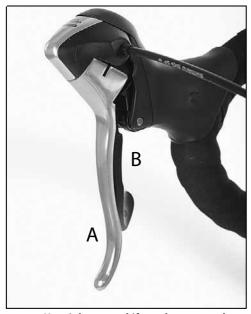
- In order to shift you must be pedalling.
- Turn the rotating ring until the desired gear is selected.
- For rapid shifting over several sprockets turn the rotating ring until the desired gear is selected.

#### Here is how you shift to a smaller sprocket:

- In order to shift you must be pedalling.
- Turn the rotating ring until the desired gear is selected.
- For rapid shifting over several sprockets turn the rotating ring until the desired gear is selected.

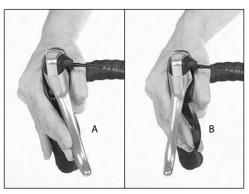
#### 8.6.4 Shimano STI

On your gear-shift there are two levers. Lever A – this is also the brake lever - is for shifting to a larger chain ring or sprocket and Lever B for shifting to a smaller one.



#### 1. Here is how you shift to a larger sprocket:

- In order to shift you must be pedalling.
- Press Lever A down with your thumb beyond the first stop and keep it depressed until the desired gear is engaged.
- For rapid shifting through several sprockets press Lever A right down and keep it depressed until the desired gear is engaged.



#### Here is how you shift to a smaller sprocket:

- In order to shift you must be pedalling.
- Depress Lever B until you feel it engage and then let it go again straight away.

#### 8.6.5 Sram Force / Rival / Red

On your gear shifter/brake lever you will find a lever which can be used to switch to both a lower and higher gear.

### 1. In order to switch to a higher gear, please do the following:

- To switch gears you must pedal.
- Press the gear shifter inwards and hold down until the desired gear has been selected.
- To switch through several gears, press the lever down fully and hold down until the desired gear has been selected.



### 2. In order to switch to a lower gear, please do the following:

- To switch gears you must pedal.
- Press the lever until you feel it coming to a stop and then let it go again.

#### 8.7 Service the brakes



## Risk of Personal Injury and Material Damage!

Incorrect operation of the brakes can lead to hazardous riding situations, falling, accidents and material damage.

- Familiarise yourself with operation of the brakes.
- Ascertain which brake lever operates the front and which one operates the back brake
- Operate the respective brake lever several times in the static position.
- You can observe opening and closing action of the brake blocks or brake calipers on the respective disk or rim.
- To operate the brake pull the lever in the direction of the handlebars.



You will obtain the best braking effect if
you operate both brake levers in a coordinated and balanced manner.



#### 8.8 Operate the quick-release action



# Risk of Personal Injury and Material Damage!

An incorrect mounting of the running wheels to a quick-release hub axle may lead to dangerous riding situations, falls, accidents and material damage.

- Read the following description regarding the handling of your quick-release hub axle and follow the instructions accordingly.
- Familiarize yourself with the handling of the quick-release hub axle.
- Repeatedly exercise mounting and demounting your running wheels to and from the quick-release hub axle.
- Check the running wheel every time after it has been mounted to the axle according to chapter 7.1.1.
- In case you are unsure if your running wheels have been mounted correctly, do not ride your bicycle and consult your specialist dealer.



#### Risk of burns!

### Quick-release levers on disk brakes can become hot during riding.

 Touch the quick-release lever very briefly with the bare finger.
 If it feels hot let it cool down.

Our bike hubs and possibly also your saddle stem may be have quick-releases fittings (often also referred to as "quick-release clamps" or simply "quick releases").



#### Legende:

1: Axle
 2: Nut
 3: Lever
 4: Spring

These quick-release fittings make possible rapid disassembly and assembly of these components without any tools.

#### Construction and function.

- Long threaded axis with a nut on one side and an eccentrically-mounted lever on the other
- There is a little spring between the nut and hub and between the hub and the lever.

- The ends of the springs with the smaller diameter always face the hub.
- On saddle stem locking quick-releases instead of the nut there is a bolt head with an Allen key hexagon insert head.

#### **Special types:**

Some running wheels are fixed with floating axles or a combination of floating axle and quickrelease lever or are equipped with other axle clamping systems. Please refer to the accompanying instructions on the handling of these parts provided by the suspension fork manufacturer and/or consult your specialist dealer.

To open the quick release a

 Push the eccentric lever away from the hub. It an now be rotated 180° around its axis.





Turn the nut counter-clockwise until the wheel can be removed from the frame or front forks without any great effort.

Should the nut come right off the screw please ensure that the little springs do not get lost.



 On saddle stem quick release levers: To loosen instead of the nut turn the bolt with the Allen key head itself counterclockwise.

**Tightening: Reverse the procedure** 

 If the quick release lever was completely removed then push it from the left (in the direction of travel) through the hub.



 Place the springs and the nuts on the bolt. Turn the right end now protruding from the hub and the nut clockwise.



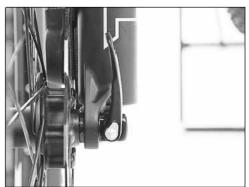
- On saddle stem quick release levers: Instead of the nut turn the bolt with the Allen key head itself clockwise.
- 4. Tilt the eccentric lever so that it approximately forms the extension of the hub axis Hold the lever in this position.



- 5. Now turn the nut or the Allen key bolt head until the eccentric lever, when turned around its bearing more than 90° to meet slight resistance (it now forms an approximately straight line extension of the hub axis.
- 6. Now press the level through a further 90° until it reaches its end stop.









# Risk of Personal Injury and Material Damage!

Incorrect operation of the brakes can lead to hazardous riding situations, falling, accidents and material damage.

If the lever is pressed into its stop position the wheel is not secured tightly enough and can become displaced during riding or loosen.

There is a danger of falling.

- Open the lever again and turn the nut counter-clockwise again as necessary.
- Check that the wheels are seated firmly as described in Chapter 7.1

#### 8.9 Using click-in pedals (optional)



## Risk of Personal Injury and Material Damage!

Click-in pedals are not safety pedals. If an excessive release force is set it is possible not to be able to twist the shoes out of the pedal quick enough in an emergency situation.

If too soft a release force is set the shoe may possibly release from the pedal unintentionally when riding.

In either case there is an increased danger of falling and injury

- Familiarise yourself with use of the click-in pedals.
- Practice mounting and dismounting with the pedals when not moving.
   Sit on the saddle and hold tight onto a stable object with one hand.
   Click both shoes alternately in and out.
   Please consult your dealer.
- Familiarise yourself with the release on careful practice rides.
- Discover for yourself the optimum tightness setting.
- Practice mounting and dismounting at various release settings.
- You can find adjustment of the release setting in the accompanying component instructions and/or consult your dealer.
- In unpredictable traffic situations and on difficult terrain it is often necessary to "click out" with one or even both shoes.
- Practice this with both feet alternately.
- When pedalling place your shoe centrally on the pedal so that you don't click in.
   If need be you can then support yourself with one or both legs on the ground.



With click-in pedals the shoe and pedal are firmly connected in a vertical direction. When pedalling you can not only push the pedal down but also pull it upwards.

To be able to use a click-in pedal to the full you need shoes specially designed for the pedal system concerned and to which the pedal hooks supplied with the pedal can be affixed.

The following description is purely exemplary

Please refer to the instructions for your pedal/shoe combination provided by the manufacturer and/or consult your specialist dealer in order to ensure a correct assembly and use of your click-in pedal system.



- Have this fitting work done by your dealer.
- 2. To step into the pedal:
  - a) Bring the pedal to its lowest position.
  - b) Position yourself with the toe of the shoe pointing downwards and with the tip of the hook on the shoe in the front pedal insertion point.



c) When the tip of the hook is positioned correctly in the pedal push the whole surface of the foot sharply downwards until the clamping mechanism clearly and audibly engages.



- The shoe is now firmly vertically connected with the pedal.
- Depending on the pedal system the shoe has sideward freedom of movement.
- 3. To loosen your shoe from the pedal:
- Twist your heel sharply away from the bike.







#### 8.10 Loading the carrier



# Risk of Personal Injury and Material Damage!

A carrier is not intended for transportation of bulky items or persons.

Misuse of the carrier can lead to dangerous riding situations, falls, accidents and material damage.

Only carry compact items of luggage with a maximum weight of 20 kg and using a suitable restraint system.

- Place your items of luggage centrally on your carrier.
- If using panniers please also ensure that these are suitable for your carrier.
   Fit them in accordance with this Owner's manual.
   Please observe the relevant Instructions for Use and/or consult your dealer.
- Attach your luggage item using a tension clip or specially suited elasticated bungee cords.
- "Shake" your bike to and fro after loading it.
- The luggage or your panniers must not work loose.
- Your luggage or your panniers must not hinder your freedom of movement when riding.
- Neither your luggage nor your panniers must touch the wheels.
- Neither your luggage nor your panniers must cover your lights or reflectors.

### 9 During riding

(Troubleshooting)



### Risk of Personal Injury and Material

#### Damage!

If you carry out maintenance procedures for which you are not authorised this may result in dangerous riding situations, falls, accidents and material damage.

Have all maintenance procedures not listed in the table below carried out only by the dealer.



# Risk of Personal Injury and Material Damage!

If you notice any unusual handling, unusual noises or faults no listed in this Chapter this can lease to dangerous riding situations, falls, accidents and material damage.

- Have anything you notice which is not listed in the following table checked immediately by your dealer and if necessary rectified.
- If the measures listed herein do not provide a remedy, please consult your specialist dealer immediately.

### 9.1 Gears and drive train

Problem	Possible causes	Corrective action								
Gear does not shift or not cleanly	Shift lever not operated correctly	Operate again								
	Gear out of adjustment	Adjust in specialist workshop								
	On steep incline too great a pressure on the pedal and/or pedalling too slowly	Repeat gear shift on flat terrain; Shift when static: Hinterrad anheben, Kurbel in Antriebsrichtung betätigen, bis der gewünschte Gang eingelegt ist.								
Drive train blocked after or during shifting	Chain jammed	Stop, operate gear shift in reverse, lift rear wheel and turn crank against direction of drive.								
		If crank cannot be moved, under no circumstances use force. Contact a specialist workshop immediately.								
Unusual noises such as clicking or cracking noises, loud grinding and/or knocking	Damaged drive train/gear components.	Contact a specialist workshop immediately.								
Uneven resistance when pedalling	Damaged drive train/gear components.	Contact a specialist workshop immediately.								
Chain off	Incorrect shift operation (see Chapter 8.6) Gear out of adjustment or damaged Possible under unfavourable	Stop, Lift the chain by hand onto the next sprocket, lift the rear wheel, operate the crank in the direction of drive (only if possible with ease).								
	conditions	If repair is not possible in this way contact a specialist workshop immediately.								
Chain comes off after or during shifting	Incorrect shift operation (see Chapter 8.6) Gear out of adjustment or damaged Possible under unfavourable conditions	Stop, Operate the shift lever in the opposite direction, Lift the chain by hand onto the next sprocket, lift the rear wheel, operate the crank in the direction of drive (only if possible with ease).								
		If repair is not possible in this way contact a specialist workshop immediately.								
Chain jumps off permanently.	Permanent incorrect operation of gear shift Gear out of adjustment or damaged.	Only operate the gear shift as per instructions in Chapter 8.6 If operation is correct contact a specialist workshop immediately.								

#### 9.2 Brake



#### **Risk of Personal Injury and**

#### **Material Damage!**

The brakes on your bike are amongst the most important components when it comes to your safety.

Incorrectly functioning brakes can lead to dangerous riding situations, falling, accidents and material damage.

- At the slightest problem and if the braking effect falls off contact your dealer immediately.
- Only ride the bike again after it has been properly readjusted by the dealer.

Problem	Possible causes	Corrective action				
	Brake not correctly assembled	Correct assembly as per Chapter 11.1				
Brakes do not function	Brake damaged	Contact a specialist workshop immediately.				
	Worn brake blocks or brake pads	Have brake blocks or brake pads replaced immediately in a specialist workshop.				
Reduced braking effect, brake levers have to be pulled too far.	Brake cable stretched, worn or clamp/s damaged	Contact a specialist workshop immediately.				
	On hydraulic brakes Brake system leaking	Contact a specialist workshop immediately				

#### 9.3 Frame and suspension



#### Risk of Personal Injury and

#### **Material Damage!**

Frame and suspension faults may lead to hazardous riding situations, falling, accidents and material damage.

- At the slightest malfunction contact your dealer immediately.
- Only ride the bike again after it has been properly readjusted by the dealer.

Problem	Possible causes	Corrective action				
Noises: Creaking, knocking, grinding or other.	Frame and/or suspension damaged	Contact a specialist workshop immediately.				
The saddle post slips into the	Tightening torque too low	Check and correct the tightening torque (see chapter 3.3).				
frame or twists out of position.	at frame and/or saddle post from Carbon	Contact a specialist workshop immediately.				

Problem	Possible causes	Corrective action					
The saddle post slips into the frame or twists out of	incorrect according	Dismantle and assemble correctly according to point 11.2					
position.	The diameter of the seatpost is too small	Assemble a seatpost with the correct diameter					
Poor suspension response	Suspension has been set incorrect	Adjustment according to the accompanying component operating manual					
Poor suspension response despite being adjusted correctly	suspension damaged	Contact a specialist workshop immediately.					

### 9.4 Splash guard, carrier and lighting set



### **Risk of Personal Injury and**

**Material Damage!** 

Splash guard, carrier and lighting set faults may lead to hazardous riding situations, falling, accidents and material damage.

- At the slightest malfunction contact your dealer immediately.
- Only ride the bike again after it has been properly readjusted by the dealer.

Problem	Possible causes	Corrective action				
Noises: Creaking, knocking, grinding or other.	Splash guard or carrier parts loose	Contact a specialist workshop immediately.				
Lighting set partly or totally	Lighting elements ("bulbs") burnt out	Replace lighting elements. Please consult your dealer.				
dysfunctional	Wiring damaged	Contact a specialist workshop immediately.				
	Dynamo defective	Contact a specialist workshop infinediately.				

### 9.5 Road wheels and tyres



### Risk of Personal Injury and

### **Material Damage!**

Damage to road wheels and tyres may lead to hazardous riding situations, falling, accidents and material damage.

- At the slightest malfunction contact your dealer immediately.
- Only ride the bike again after it has been properly readjusted by the dealer.

Problem	Possible causes	Corrective action				
Road wheels "hopping" up and down	Tyre damage Defective spokes	Contact a specialist workshop immediately.				
		Remove debris Afterwards use your bike particularly carefully				
Noises: Creaking, knocking, grinding or other.	Debris caught in wheel	Have your bike checked by a specialist workshop for any consequential damage.				
	Damage to road wheel	Contact a specialist workshop immediately.				
Schwammiges Fahrverhalten	Air pressure too low	Increase air pressure (see Chapter 7.1.3) If the same handling occurs again shortly after there is a slow puncture (see next line)				
		Replace tube and if necessary tyre and tape on tubeless systems				
Increasingly spongy handling		Replacing tyres Contact a specialist workshop (*) immediately. The bike must not be used until then.				
Very unusual rolling characteris- tics (you can feel every stone)	Flat tyre	(*): Changing the tube, tyre and rim tape can only be undertaken given the required experience.				
		Have your dealer demonstrate this procedure to you and practice this job until you are familiar with it.				
		For removing and refitting road wheels see Chapters 8.8 and 11.1.				

#### 10 After falls or accidents



## Risk of Personal Injury and Material Damage!

Damage after a fall or accident may lead to hazardous riding situations, falling, accidents and material damage.

- After a fall or accident contact your dealer immediately.
- Only ride the bike again after it has been properly readjusted by the dealer.

After a fall basically you must renew all damaged bike components such as

- Handlebars
- triathlon / time trial attachment
- Bar ends
- Handlebar stem
- seat post (if made of carbon)
- saddle (if saddle framework is made of carbon)
- rims (if made of carbon)
- and crank.

All other bike parts must be checked by your dealer and if necessary replaced.



## Risk of Personal Injury and Material Damage!

More and more bikes are fitted with carbon fibre components

Carbon fibre components are very sensitive and if incorrectly fitted and if slightly damaged can lead to dangerous riding situations, falling, accidents and material damage.

- Please note all instructions regarding assembly, care, maintenance and checking these parts in accordance with the accompanying component servicing instructions.
- Only have assembly work on or to carbon fibre parts carried out in a specialist workshop.

- After damage and falls you must consult your dealer.
- Only use your bike again after he has replaced the damaged parts or assured you that you can continue to use the bike without any worries.
- Please also refer to the information provided in chapter 4.8

### 11 Transporting your bike



# Risk of Personal Injury and Material Damage!

An unsuitable transportation system may damage parts of your bike which are important for safety and lead to dangerous riding situations, falls, accidents and material damage.

- Only transport this bicycle inside your car.
- Objects or items may not be placed on this bicycle or its frame.
- Any bike carrier (e.g. roof, rear end) that requires the frame or bicycle to be mounted or clamped is not suitable for this bicycle.

This bike may only be transported inside a vehicle. Please note during transportation that the bike is secured and is not damaged by other packaging items for example.

For transportation you may remove the front and rear wheels and the saddle stem with saddle if these are fitted with quick releases. Only undertake this disassembly if you are sure that you can reassemble these parts correctly.

See Chapter 8.3, 8.8

If your road wheels are bolted to the frame (e.g. in the case of hub gears) consult your dealer



#### Danger of material damage!

If your bike is inside a vehicle solar radiation can cause the tyres to burst or come away from the rim.

Let the air out of the tyres prior to transportation and fill them again after transportation (see Chapter 7.1.3)

#### 11.1 Fit and remove road wheels



## Risk of Personal Injury and Material Damage!

Incorrectly fitted road wheels can lead to dangerous riding situations, falling, accidents and material damage.

- You must have your dealer demonstrate fitting and removing your road wheels.
- Practice this job at least once under his supervision and control.
- Only remove and fit the seat post and saddle if you are sure you have mastered this job.



#### Risk of burns!

After long descents, the bicycle rims and brake disks can get very hot.

- Do not touch the rims or brake disks immediately after a descent.
- Let the rims and brake disks cool down before you touch them.
- In order to check the temperature, touch the rims and brake disks very briefly with your bare finger. If they are hot, wait a few minutes and repeat the test until the rims and brake disks have cooled down.



#### Danger of material damage!

- Hydraulic brakes must under no circumstances be operated after removing the road wheel!
- If your bike has a disk brake use the mandatory transportation wedges supplied for that purpose for transportation following removal of the road wheel.
- Remove these immediately prior to refitting the road wheels.
   Please comply with the accompanying component instructions here.



## Risk of Personal Injury and Material Damage!

Rim brakes only: When fitting and removing the brake blocks can get twisted.

- When fitting the road wheels please note that the brake blocks are correctly positioned (see Chapter 7.8).
- If these are not correctly positions please contact a specialist workshop.

For transportation you may remove and later replace the road wheels on your bike if these are fitted with quick releases

If your bike has rim brakes please note that you do not change the position of the brake blocks with the tyre.

- This could happen especially in the case of large-volume tyres. If the tyre do not easily pass easily between the brake caliper blocks let a sufficient amount of air out of them.
- Then inflate the tyres afterwards to the correct pressure.

# 11.1.1 All categories/series except the category racing bike/triathlon

- Remove the front wheel first (continue with 3).
- Switch to the smallest pinion of the rear wheel's sprocket cassette (see chapter 8.6).





### Risk of Personal Injury and Material Damage!

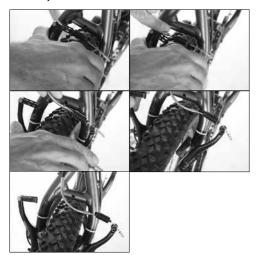
Spinning running wheels can cause injuries to your hands.

- Never reach near a spinning running wheel.
- Come to a complete standstill before carrying out works on, or around, the wheels.
- In order to do this, lift the bicycle rear up, actuate the corresponding shift lever and turn the crank by hand in the riding direction until the chain is placed on the smallest pinion.
- Brake the running wheel until it comes to a complete standstill (see chapter 8.7).

#### Open the brake (only applies to rim brakes, not to disk brakes)

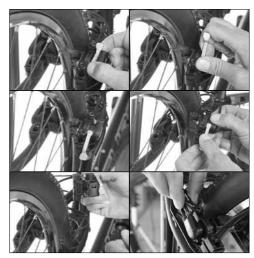
### a) As for rim brakes with cable control (e.g., from Shimano):

 Press the brake shoes together with one hand and remove the cable guide from the yoke.



#### b) On Magura: hydraulic rim brakes:

- Move the fixing lever over and remove the entire brake assembly including brake booster from the brake sockets.
- Please make sure not to lose any distance washers that may come loose.



### 4. On front wheel with hub dynamo (if fitted):

 Remove the push-fit connector between the dynamo and cable.

#### 5. Loosen the wheel hubs.

- Open the quick release on your road wheel (see also Chapter 8.8 Quick Releases)
- Raise the rear of the bike, operate the shift lever concerned and turn the crank in the drive direction until the chain lies correctly on the smallest sprocket.
- Turn the locknut enough to allow sufficient room on the axle.
   With other types of clamping.
- Loosen the clamp as per the accompanying component instruction

#### Remove the road wheels from the frame and forks.

- Front wheel: Lift the bike up by the handlebars and withdraw the road wheel from the front fork dropouts.
- Rear wheel: Lift the bike up slightly at the back and press the gear mechanism backwards. In this position push the rear wheel gently in the direction of the dropout openings.







After removing place the bike carefully on its left hand side.



#### Danger of material damage!

With no rear wheel the frame and/or the gear mechanism can become damaged.

 After removing the rear wheel lie the bike on its left side or use a suitable assembly stand.

To fit your road wheels. Fit the rear wheel first.

1. a) Inserting the rear wheel

- Lift up the bike rear, placing the rear wheel under it so that the chain is over the smallest sprocket.
- Disk brakes: Insert the road wheel so that the brake disk can be easily pushed between the brake pads.





 Carefully lower the rear of the bike until the axle is at the dropout stop on the right and left sides.





#### 1. b) Inserting the front wheel:

- Lift up the bike by the handlebars,
- Placing the front wheel under the front forks dropouts and
- For disc brakes: Attach the wheel in such a way that the disc brakes are able to move freely between the brake pads.
- Carefully lower the forks until the axle is flush at the dropout stops on the right and left sides.

#### 2. Tighten the wheel hubs.

- When tightening with quick releases: see Chapter 8.8.
- With other types of clamping: Tighten the hubs as per the accompanying component instruction.

### a) Close rim brakes on cable brakes:

Press the brake shoes together.



Insert the cable in the yoke.



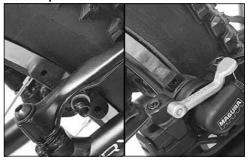
- 3. b) Hydraulic rim brakes:: Fitting is as removal only in reverse sequence.
- Place the brake booster on the lead screws
- Insert any distance washers in the correct position and place the brake on the brake bosses.



• Swivel the locking lever so that the brake is fixed in place again.



 Please ensure that the brake blocks correctly cover the rim shoulder when operated.



### On front wheel with hub dynamo (if fitted):

 Refit the push connector between the hub dynamo and the cable.

#### 6. Check installation:

- Operate the brakes.
- If the brake block or brake touches the rim or the brake disks this can indicate incorrect seating of the hub in the dropouts.
- In that case release the quick release, check and correct the hub seat and close the quick release again.
- The brake (on rim brakes) must not be opened during this procedure. If there is no improvement after this please contact your dealer immediately.
- Check that the lighting (if fitted) is working.
- Ensure that the road wheels do not come into contact with either mudguards or carrier (if fitted).







#### 11.1.2 Race/Triathlon

- Remove the front wheel first (continue with 3.)
- Switch to the smallest pinion of the rear wheel's sprocket cassette (see chapter 8.6)



# Risk of Personal Injury and Material Damage!

Spinning running wheels can cause injuries to your hands.

- Never reach near a spinning running wheel.
- Brake the spinning running wheel by using the corresponding brake lever until it comes to a complete standstill before performing any work near the running wheel.
- In order to do this, lift the bicycle rear up, actuate the corresponding shift lever and turn the crank by hand in the riding direction until the chain is placed on the smallest pinion.
- Brake the running wheel until it comes to a complete standstill (see chapter 8.7).
- 3. Open rim brake.



- a) On racing bike brakes:
   Shimano und Sram:
- Move the lever upwards.



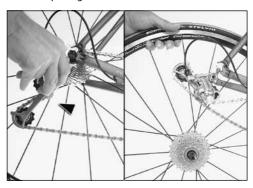
#### b) Campagnolo:

- There is no lever on the brake:
- To release press the pin on the brake lever from inwards to outwards.
   At the same time pull on the brake lever slightly.





- 4. Loosen the wheel hubs.
- Open the quick release on your road wheel (see also Chapter 8.8 Quick Releases)
- Turn the locknut enough to allow sufficient room on the axle. With other types of clamping.
- Remove the road wheels from the frame and forks.
- Front wheel: Lift the bike up by the handlebars and withdraw the road wheel from the front fork dropouts.
- Rear wheel: Lift the bike up slightly at the back and press the gear mechanism backwards. In this position push the rear wheel gently in the direction of the dropout openings.



After removing place the bike carefully on its left hand side



#### Danger of material damage!

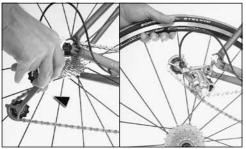
With no rear wheel the frame and/or the gear mechanism can become damaged.

• After removing the rear wheel lie the bike on its left side or use a suitable assembly stand.

To fit your road wheels. Fit the rear wheel first.

- 1. a) Inserting the rear wheel
- Lift up the bike rear,

 placing the rear wheel under it so that the chain is over the smallest sprocket



 Carefully lower the rear of the bike until the axle is at the dropout stop on the right and left sides.



#### b) To assemble the front wheel

- Lift up the bike by the handlebars,
- Placing the front wheel under the front forks dropouts and
- Carefully lower the forks until the axle is flush at the dropout stops on the right and left sides.

#### 2. Tighten the wheel hubs.

 When tightening with quick releases: see Chapter 8.8

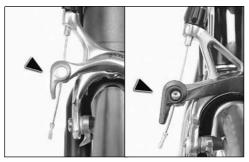




#### 3. Close rim brakes

a) On racing bike brakes: Shimano und Sram:

Move the lever downwards.





b) Campagnolo:



- There is no lever on the brake:
- Follow the reverse procedure to opening and press the pin on the brake lever from outwards to inwards.
- At the same time pull the brake lever.

#### 4. Check installation:

- Operate the brakes.
- If the brake block or brake touches the rim or the brake disks this can indicate incorrect seating of the hub in the dropouts.
- In that case release the quick release, check and correct the hub seat and close the quick release again.
- The brake (on rim brakes) must not be opened during this procedure. If there is no improvement after this please contact your dealer immediately.

## 11.2 Remove and replace saddle post and saddle



## Risk of Personal Injury and Material Damage!

An incorrectly fitted saddle post can lead to dangerous riding situations, falling, accidents and material damage.

- You must have your dealer demonstrate fitting and removing your saddle post.
- Practice this job at least once under his supervision and control.
- Only remove and fit the saddle post and saddle if you are sure you have mastered this job.

For transportation you can remove your bike's saddle post complete with saddle and replace it again afterwards.

The saddle post is held with a clamp in the frame seat tube and is tightened with either a quick release or a hexagon socket.

On carbon fibre saddle posts special types may be fitted with two screws.



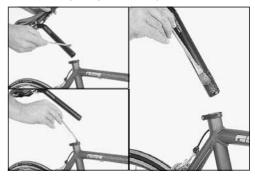
For clamping without a quick release a hexagon socket and a torque wrench of the appropriate size are required. Please also consult your dealer.

#### To remove your saddle post:

- Release the saddle clamp at the quick release as per Chapter 8.8 or by loosening the Allen screw with an Allen key.
- 2. Withdraw the saddle with saddle post from the frame.



To replace your saddle post:



- On carbon saddle post and/or saddle stem
- Apply assembly paste to the saddle post and to the inside of the seat tube and only use assembly paste for carbon parts for this procedure.
- Saddle post and seat tube must not be greased. Only carbon assembly paste may be used.
- Saddle posts made of aluminium may only be fitted using a carbon assembly paste.
- Push the saddle complete with saddle
  post into the frame seat tube until the
  desired saddle height is obtained. In this
  position the lower end of the saddle post
  must be a minimum of 10 cm below the
  lower edge of the top tube.

Do not rely on the marking on the saddle post.

To check the correct insertion distance:

Hold a finger tip against the saddle post when fitted directly above the clamp.

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- Keep your finger tip in this position and withdraw the saddle post from the seat tube.
- Hold the saddle post laterally beside the seat tube so that your finger is again level and directly above the clamp.
- In this position the lower end of the

  saddle post must be a minimum of 10 cm
  below the lower edge of the top tube.



- Turn the saddle so that the saddle points in the direction of travel.
- Ensure that the clamp is flush in the frame and that the seat tube slots and the clamp are covered.
- Close the quick release as per Chapter 8.8 or tighten the Allen screw with a torque wrench.

Please observe assembly instructions and the specified torque in the accompanying component instructions indicated in table 3.3.





# Risk of Personal Injury and Material Damage!

An over-tightened carbon fibre saddle post can break when riding and lead to dangerous riding situations, falling, accidents and material damage.

- The seat tube clamp must be tightened firmly in order to prevent the saddle post from lowering into the frame or laterally twisting during the ride.
- If the saddle post does not remain in the desired position, even though you have reached the maximum admissible tightening torque, please consult your specialist dealer immediately.
- Please observe assembly instructions and the specified torque in the accompanying component instructions

## 12 Cleaning and caring for your bike



### Risk of Personal Injury and Material Damage!

Corrosion can damage components of your bike which are important for safety so that they are no longer secure. These components may then brake during riding and thus lead to serious falls.

Corrosion is caused, amongst other things, by

- salt (e.g. due to salt spreading in winter)
- salty air Luft (e.g in coastal or industrial areas)
- perspiration.



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#### **Danger of material damage!**

Do not use steam washers. The high pressure water jet can damage your bike.

Good maintenance will increase the life of your bike and its components. Clean and maintain your bike regularly.

For wet cleaning use a gentle water jet or a bucket of water and a sponge.

Only use clean fresh water or desalinated water.

There are many ways of washing a bike. A proven cleaning recommendation for a very dirty bike is as follows:

- With a gentle water jet remove large items of debris such as soil, stones and sand etc.
- 2. Let the bike dry off somewhat.
- Spray your entire bike with a suitable detergent.

With many detergents and given a low level of soiling simply spraying and rinsing off after the specified time for them to work is sufficient.

You can remove stubborn dirt after the working time for example with a radiator paintbrush before rinsing off.



#### **Danger of material damage!**

Cleaning, lubrication and preserving agents are chemical products.

Incorrect use can damage your bike.

- Only use products expressly suitable for bikes.
- Ensure that these products do not attack either paint, rubber, plastic or metal parts etc. Consult your dealer.
- Follow the respective manufacturer's instructions.
- Rinse the entire bike with a gentle water jet and allow it to dry.
- 5. Clean the chain.
- Drip a suitable chain cleaner into a clean, spirit-free cotton cloth and wipe the chain down. When doing so slowly operate the crank against the direction of drive.
- Repeat this process as often as possible with a clean area of the cloth until the chain is clean.
- Drip a suitable chain cleaner into a clean, spirit-free cotton cloth and wipe the chain down.
- If cleaner remains between the chain links the new grease will be immediately broken down and will be totally ineffective.
- Sparingly apply a lubricant suitable for bicycle chains to the chain links.



#### **Danger of material damage!**

Greases for motor cycle chains will gum up your bike chain and the drive chain components.

 Only use lubricants expressly approved for use with bike chains.



## Risk of Personal Injury and Material Damage!

If too much lubricant is used it can drip onto the rim and brake disk and contaminate them.

### This will reduce the effectiveness of the brakes

- Remove excessive lubricant on the chain using a clean, dry and spirit-free cotton cloth.
- Clean the rim and brake disk with a suitable degreasing agent. Please consult your dealer.



## Risk of Personal Injury and Material Damage!

wax polish spray or a preserving agent gets onto the rim or brake disks and/ or brake blocks the effectiveness of the brakes will be reduced.

- Clean these parts with a suitable degreasing agent. Consult your specialist dealer.
- Clean any remaining very dirty parts by hand using a clean spirit-free cotton cloth using a suitable detergent.
- Spray the entire bike with a suitable wax polish or similar preserving agent.

#### **Exceptions:**

- Brake blocks or brake pads
- · Rims in the case of rim brakes
- Brake disks
- Handlebar grips/ brake lever/ shifter
- Saddle
- Tyre
- Polish your bike after the prescribed working time using a clean, spirit-free cotton cloth.
- Clean the brake blocks, brake pads, rims (in the case of rim brakes) and brake disks by hand using a clean, spirit-free cloth using a suitable degreasing agent.

Clean and lubricate your chain as described after every ride in the wet and Every prolonged ride on a sandy subsurface and at the latest every 200 km.



## Risk of Personal Injury and Material Damage!

Worn parts and unrepaired damage can lead to dangerous riding situations, falls, injuries and property damage.

- Regularly maintain and service your bicycle.
- Take your bicycle to a specialist workshop at the compulsory maintenance intervals.
- Only this way, worn parts and possible damages can be discovered and repaired.



## Risk of Personal Injury and Material Damage!

Compared to adults, children and juveniles often use their bicycles in a way that damages the material and parts more quickly.

- Take frequently used bicycles of children and juveniles to a specialist workshop for inspection every 6 months.
- If you discover damages on your bicycle for children or juveniles, immediately take it to a specialist workshop for inspection.

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### Servicing schedule:

Have servicing carried out at intervals prescribed only in a specialist workshop authorised by the manufacturer.

Nature of inspection	Normal use	Frequent sport, competition or use of a competitive nature				
1. Inspection	after 200 km or 2 months whichever is sooner	after 100 km or 1 month whichever is sooner				
Subsequent inspections	every 2000 km or 1 x per annum	every 500 km or every 2 months				
Check brake pads/brake blocks	every 400 km	every 100 km				
Check brake disks	every 400 km	every 100 km				
Check chain wear	every 500 km	every 250 km				
Check the rear suspension bea- ring for full-suspension frames incl. checks/relubricating the roller bearing on the shock absorber (if applicable)	Every 500 km or once a year	Every 250 km or every two months				
Replace handlebars and stem	after a crash (see Chapter 10) as indicated by component manu- facturer or every 5 years at the latest	after a crash (see Chapter 10) as indicated by component manu-fac- turer or every 2 years at the latest				

Under unfavourable conditions your chain can wear rapidly. Changing it early will extend the life of your sprockets.

# 13 Storing your bike for a lengthy period



#### Danger of material damage!

Incorrect storage of a bike can damage bearings and tyres and promote corrosion.

- Please observe the following instructions.
- 1. Clean and maintain your bike as described in Chapter 12.
- Only store your bike in dry and dust-free premises.
- Use suitable bike stands (e.g. tripod, wall hooks). Please consult your dealer.
- 4. Stand your bike with one or both wheels on the floor
- Lift your bike every 2-3 weeks and spin your wheels a couple of turns.
- Operate the handlebars back and forwards a couple of times.
- urn the crank by hand a couple of revolutions against the direction of drive.
- When using again carry out a check as described in Chapter 7.

### 14 Warranty and Guarantee

#### 14.1 Warranty

For our bikes, the statutory warranty regulations apply. Your contact for all warranty claims is with the dealers where the product was purchased.

#### 14.2 Frame Guarantee

To clarify the applicable warranty period and the guarantee of our products, please contact the dealer from whom you purchased the product. This information can also be found on our website (see Contacts).

#### 14.3 Frame Guarantee conditions

The claim relates only to the frame layout and not to paint and decor.

The claim relates only to the frame structure and not to paint and decor.

- when defects or damages result from the fact that the requirements of this manual have not been met or followed.
- In case of defects and damage due to force majeure, accident, improper use, incorrect repairs, lack of maintenance / cleaning or normal wear and tear.
- for complaints that are attributed to the fact that you have changed parts or other items not specified in the instruction manual or original spare parts approved by us.
- changes to the bike without the prior consent of the manufacturer. If a frame of the same type is no longer available, we reserve the right to supply a replacement part, which may differ in shape and color from the original frame or part. A claim for delivery of the goods of the same type of goods does not exist.

15 Handover inspection	Inspecting the wheels:
checklist	Concentricity and centring of the wheel rims,
Inspecting the brake	concentricity and position of the cover
Laying of brake cables/lines	Testing the spoke tension / air and tyre pressure
Adjustment of the hand brake lever	<ul> <li>Correct installation and fixed position of the wheels</li> </ul>
Adjustment of the brake pads	Other inspections:
Visual tightness test of the hydraulic brake systems  Checking all fastening screws in the brake	Adjustment and fixed position of the handlebars and handlebar stem, fixed position of the crank arm an
system  The functioning and response of the front and rear wheel brakes	Adjustment and fixed position of the saddle and seatpost, fixed position of the handles
	Fixed position of the assembly rivet of the chain
Inspecting the gearshift:	Functioning of lights for TK
Laying the hub cable and shift cable  Adjustment of the gear lever or gearshifter	Adjustment and fixed position of the carrier, mudguards and kickstands for TK
Adjustment of the end stops (derailleur/switchgear)	Assembly and fixed position of other attachment parts
Adjustment of the cable tension	When handing over the bicycle:
Functioning and freedom of movement of the gearshift	The purchased object was handed over in a complete and perfect condition including the
Checking all fastening screws in the gearshift system	operating manual.  Verbal instructions were given on the safe use of
Inspecting the chassis:	the bicycle, particularly operating guidelines for
Basic functions and tightness of the front fork	the disc brakes – if applicable.
Basic functions and tightness of the suspension strut, adjustment/freedom of movement of the steering head bearing, checking all fastening	Reference was made to the respective instructions in the operating manual which are to be observed.
screws of the chassis components	Reference was made to the warranty obligations
Inspecting all screw connections in the chainstays	in the CUBE operating manual.
After inspecting these items, please check off!	
Comments:	
Place, date: Retailer signature:	
Purchaser signature (legal guardian for children un	der 18 years of age)

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	Telefon: Telephone:	PLZ / Ort: Post code/city:	Straße: Street	Vorname: Surname:	Nachname: Name:	Kunde / Käufer: stomer/purchaser	E-Mail:	Telefon / Fax: Telephone/fax:	Land: Country:	PLZ / Ort: Post code/city:	Straße: Street:	Firma: Company:	Name Verkäufer: Name of retailer:	ndler / Verkäufer: Retailer/seller:
Das Original verbleibt in dieser Bedienungsanleitung The Original should remain in the Handbook														
nleitung 300k	<b>Stempel/ stamp</b> Unterschrft des Händters/ Signature of the dealer				Datum date	Ort location	und wird in einem fahrbereiten Zustand übergebe and will be hand out in a roadworthy condition.		Das Fahrrad wurde endmontiert von: The bicycle is finally assembled by:	<b>CUBE</b>				